

[illegible]



```

SSSSSSSSS  AAAAAA  TTTTTTTTTT  SSSSSSSS  SSSSSSSS  SSSSSSSS  333333  888888
SSSSSSSSS  AAAAAA  TTTTTTTTTT  SSSSSSSS  SSSSSSSS  SSSSSSSS  333333  888888
SS          AA      AA      SS          SS          SS          33          33      88          88
SS          AA      AA      SS          SS          SS          33          33      88          88
SS          AA      AA      SS          SS          SS          33          33      88          88
SS          AA      AA      SS          SS          SS          33          33      88          88
      SSSSSS  AA      AA      SSSSSS  SSSSSS  SSSSSS  33          33      888888
      SSSSSS  AA      AA      SSSSSS  SSSSSS  SSSSSS  33          33      888888
          SS  AAAAAAAAAA  TT          SS          SS          33          33      88          88
          SS  AAAAAAAAAA  TT          SS          SS          33          33      88          88
          SS  AA      AA  TT          SS          SS          33          33      88          88
          SS  AA      AA  TT          SS          SS          33          33      88          88
SSSSSSSSS  AA      AA  TT          SSSSSSSS  SSSSSSSS  SSSSSSSS  333333  888888
SSSSSSSSS  AA      AA  TT          SSSSSSSS  SSSSSSSS  SSSSSSSS  333333  888888

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....  
....  
....  
....

```

LL          IIIIII  SSSSSSSS
LL          IIIIII  SSSSSSSS
LL          II      SS
LL          II      SS
LL          II      SS
LL          II      SS
LL          II      SSSSSS
LL          II      SSSSSS
LL          II      SS
LL          II      SS
LL          II      SS
LL          II      SS
LLLLLLLLLLL IIIIII  SSSSSSSS
LLLLLLLLLLL IIIIII  SSSSSSSS

```



(1)	55	DECLARATIONS
(1)	106	CONDITION TABLES
(1)	145	TM SETUP, TM CLEANUP
(1)	236	CONDITION SUBROUTINES - SETUP AND CLEANUP
(1)	329	FORM CONDS
(1)	422	VERIFY
(1)	534	VFY_CLEANUP



```
0000 1 .TITLE SATSSS38 SATS SYSTEM SERVICE TESTS $RESUME (SUCC S.C.)
0000 2 .IDENT 'V04-000'
0000 3
0000 4
0000 5 *****
0000 6 *****
0000 7 *
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0000 25 *
0000 26 *****
0000 27
0000 28
0000 29 :++
0000 30 : FACILITY: SYSTST (SATS SYSTEM SERVICE TESTS)
0000 31
0000 32 : ABSTRACT:
0000 33
0000 34 : THIS MODULE CONTAINS SUBROUTINES WHICH, WHEN LINKED
0000 35 : WITH SUCCOMMON.OBJ, FORM TEST MODULE SATSSS38 TO TEST SUCCESSFUL
0000 36 : OPERATION OF THE $RESUME SYSTEM SERVICE. THE SERVICE IS INVOKED
0000 37 : UNDER VARIOUS INPUT CONDITIONS WITH VARYING INPUT PARAMETERS. ONLY
0000 38 : SUCCESSFUL STATUS CODES ARE EXPECTED IN THIS TEST MODULE. CORRECT
0000 39 : OPERATION OF THE SERVICE FOR EACH OF ITS ISSUANCES IS VERIFIED BY
0000 40 : CHECKING FOR AN SSS NORMAL STATUS CODE, EXPECTED RETURN ARGUMENTS
0000 41 : AND EXPECTED FUNCTIONALITY PERFORMED.
0000 42
0000 43 : ENVIRONMENT: USER MODE IMAGE; NEEDS CMKRNL PRIVILEGE,
0000 44 : DYNAMICALLY ACQUIRES OTHER PRIVILEGES, AS NEEDED.
0000 45
0000 46 : AUTHOR: THOMAS L. CAFARELLA, CREATION DATE: AUG, 1977
0000 47
0000 48 : MODIFIED BY:
0000 49
0000 50 : VERSION 1.5 : 25-MAY-79
0000 51 : 01 LDJ 10/11/79 Fixed bug caused by DIB$K_LENGTH change ACG052.RNO mem
0000 52
0000 53 :--
```



```

0000 55 .SBTTL DECLARATIONS
0000 56 :
0000 57 : INCLUDE FILES:
0000 58 :
0000 59 $PRVDEF ; PRIVILEGE BIT DEFINITIONS
0000 60 $PHDDEF ; PROCESS HEADER OFFSETS
0000 61 $PQLDEF ; PROCESS QUOTA CODES
0000 62 $PCBDEF ; PCB LABELS
0000 63 $DIBDEF ; DEVICE INFO BLOCK OFFSETS
0000 64 :
0000 65 : MACROS:
0000 66 :
0000 67 :
0000 68 : EQUATED SYMBOLS:
0000 69 :
0000 70 :
0000 71 : OWN STORAGE:
0000 72 :

```



SATSSS38  
V04-000

SATS SYSTEM SERVICE TESTS \$RESUME (SUCC 16-SEP-1984 00:52:14 VAX/VMS Macro V04-00 Page 3  
DECLARATIONS 5-SEP-1984 04:30:57 [UETPSY.SRC]SATSSS38.MAR;1 (1)

```
00000000 74 .PSECT RODATA, RD, NOWRT, NOEXE, LONG
0000 75 TEST_MOD_NAME:: STRING C, <SATSSS38> ; TEST MODULE NAME
0009 76 TEST_MOD_NAME_D: STRING I, <SATSSS38> ; TEST MODULE NAME DESCRIPTOR
0019 77 MSG1_INP_CTL: STRING I, <SSRES!4ZW: CONDITIONS:>
0039 78 ; FAO CTL STRING FOR MSG1 IN SUCCOMMON.MAR
0039 79 MSG3_ERR_CTL:: STRING I, <*SSRES!4ZW: !AS>
0051 80 ; FAO CTL STRING FOR MSG3 IN SUCCOMMON.MAR
0051 81 SUBJPRN: STRING I, <SATSSS38 CRE> ; PROC, CLUSTER & MBX NAME FOR CREATED PROC
0065 82 IMAGNAM: STRING I, <SYSTST$RES:SATSUT05.EXE> ; IMAGE NAME FOR CREATED PROC
0084 83 QUOTALIST: $QUOTA CPULM, 0 ; INFINITE CPU
0089 84 $QUOTA BYTLM, 512 ; BYTE LIMIT FOR BUFFERED I/O
008E 85 $QUOTA FILLM, 2 ; OPEN FILE COUNT LIMIT
0093 86 $QUOTA PGFLQUOTA, 10 ; PAGING FILE QUOTA
0098 87 $QUOTA PRCLM, 2 ; SUBPROCESS QUOTA
009D 88 $QUOTA TQELM, 3 ; TIMER QUEUE ENTRY QUOTA
00A2 89 $QUOTA LISTEND ; DEFINES END OF LIST
```



00000000	0000	91	.PSECT	RWDATA, RD, WRT, NOEXE, LONG	
00000008	0000	92	PRIVMASK:	.BLKQ 1	: ADDR OF PRIVILEGE MASK (IN PHD)
0000000C	0008	93	MBXCHAN:	.BLKL 1	: CHAN. NO. FOR MAILBOX FOR CREATED PROCESS
	000C	94	MBXCHANINFO:		: CHANNEL INFO RETURNED BY GETCHN
00000074	000C	95		.LONG DIB\$K_LENGTH	
00000014	0010	96		.ADDRESS +4	
00000088	0014	97		.BLKB DIB\$K_LENGTH	
0000008C	0088	98	MBXUNIT:	.BLKL 1	: SAVE AREA FOR MAILBOX UNIT NUMBER
	008C	99	MBXBUFF:	STRING 0,120	: MAILBOX BUFFER FOR CREATED PROCESS
00000110	010C	100	DEST_PIDADR:	.BLKL 1	: DESTINATION PID ADDR, WRITTEN BY S.S.
00000114	0110	101	ZEROPIID:	.BLKL 1	: PID OF ZEROES
00000000	0114	102	SELFPIID:	.LONG 0	: PID OF THIS PROCESS
0000011C	0118	103	CREPIID:	.BLKL 1	: PID OF CREATED PROCESS
00000120	011C	104	SUBJPID:	.BLKL 1	: PID OF SUBJECT PROCESS (SELF OR OTHER)



```
.SBTTL CONDITION TABLES
***** CONDITION TABLES FOR RESUME SYSTEM SERVICE *****
COND 1,NOTARG,<PID ADDRESS>,-
      <NOT SPECIFIED>,-
      <SPECIFIED, NON-ZERO>,-
      <SPECIFIED, ZERO>,-
      .ADDRESS 0
      .ADDRESS SUBJPID
      .ADDRESS ZEROPID
COND 2,NOTARG,<PROCESS NAME ADDRESS>,-
      <SPECIFIED>,-
      <NOT SPECIFIED>,-
      .ADDRESS SUBJPRN
      .ADDRESS 0
COND 3,NOTARG,<PROCESS TYPE>,-
      <SELF>,-
      <SUBPROCESS>,-
      <DETACHED, DIFFERENT GROUP>,-
      <DETACHED, SAME GROUP, SAME MEMBER>,-
      <DETACHED, SAME GROUP, DIFFERENT MEMBER>,-
      .LONG ^XFFFFFFFF ; PSEUDO-UIC
      .LONG 0 ; PSEUDO-UIC
      .BLKL 1 ; UIC
      .BLKL 1 ; UIC
      .BLKL 1 ; UIC
COND 4,NULL
COND 5,NULL
.PSECT SATSSS38,RD,WRT,EXE
```

	0120	106
	0120	107
	0120	108
	0120	109
	0120	110
	0120	111
	0120	112
	0120	113
	0120	114
00000000	016B	115
0000011C	016F	116
00000110	0173	117
	0177	118
	0177	119
	0177	120
	0177	121
	0177	122
00000051	01AD	123
00000000	01B1	124
	01B5	125
	01B5	126
	01B5	127
	01B5	128
	01B5	129
	01B5	130
	01B5	131
	01B5	132
FFFFFFFF	024A	133
00000000	024E	134
00000256	0252	135
0000025A	0256	136
0000025E	025A	137
	025E	138
	025E	139
	025F	140
	025F	141
	0260	142
00000000		143



```
0000 145 .SBTTL TM_SETUP, TM_CLEANUP
0000 146 :++
0000 147 : FUNCTIONAL DESCRIPTION:
0000 148 :
0000 149 : TM SETUP AND TM CLEANUP ARE CALLED TO PERFORM
0000 150 : REQUIRED HOUSEKEEPING AT THE BEGINNING AND END, RESPECTIVELY, OF
0000 151 : TEST MODULE EXECUTION.
0000 152 :
0000 153 : CALLING SEQUENCE:
0000 154 :
0000 155 : BSBW TM_SETUP BSBW TM_CLEANUP
0000 156 :
0000 157 : INPUT PARAMETERS:
0000 158 :
0000 159 : NONE
0000 160 :
0000 161 : IMPLICIT INPUTS:
0000 162 :
0000 163 : NONE
0000 164 :
0000 165 : OUTPUT PARAMETERS:
0000 166 :
0000 167 : NONE
0000 168 :
0000 169 : IMPLICIT OUTPUTS:
0000 170 :
0000 171 : TM_SETUP: COND TABLE INDEX REGISTERS (R2,3,4,5,6) CLEARED;
0000 172 : ALL PRIVILEGES ACQUIRED.
0000 173 :
0000 174 : COMPLETION CODES:
0000 175 :
0000 176 : EFLAG SET TO NON-ZERO IF ERROR ENCOUNTERED.
0000 177 :
0000 178 : SIDE EFFECTS:
0000 179 :
0000 180 : SS_CHECK AND ERR_EXIT MACROS CAUSE PREMATURE EXIT
0000 181 : (VIA RSB) IF ERROR ENCOUNTERED.
0000 182 :
0000 183 :--
0000 184 :
0000 185 :
0000 186 :
0000 187 TM_SETUP::
52 D4 0000 188 CLRL R2 ; INITIALIZE
53 D4 0002 189 CLRL R3 ; .. CONDITION
54 D4 0004 190 CLRL R4 ; .... TABLE
55 D4 0006 191 CLRL R5 ; ..... INDEX
56 D4 0008 192 CLRL R6 ; ..... REGISTERS
FFF3' 30 000A 193 BSBW MOD MSG PRINT ; PRINT TEST MODULE BEGIN MSG
00000000'EF 00000000'EF DE 000D 194 MOVAL TEST_MOD_SUCC,TMD_ADDR ; ASSUME END MSG WILL SHOW SUCCESS
03 00 00000000'8F F0 0018 195 INSV #SUCCESS,#0,#3,MOD_MSG_CODE ; ADJUST STATUS CODE FOR SUCCESS
00000000'EF 00000000'EF 0020
59 00000000'9F D0 0048 196 MODE TO,5$,KRNL ; KERNEL MODE TO ACCESS PHD
00000000'EF 69 DE 004F 197 MOVL @#CTL$GL PHD,R9 ; GET PROCESS HEADER ADDRESS
0056 198 MOVAL PHD$Q PRIVMSK(R9),PRIVMASK ; GET PRIV MASK ADDRESS
0057 199 MODE FROM,5$ ; BACK TO USER MODE
200 PRIV ADD,ALL ; GET ALL PRIVILEGES
```



```
0077 201 $SETPRN S TEST MOD_NAME_D ; SET PROCESS NAME
0084 202 SS_CHECK NORMAL ; CHECK STATUS CODE RETURNED FROM SETPRN
00B2 203 $WAKE S SELFPIID ; GET MY PID
00C1 204 SS_CHECK NORMAL ; CHECK FOR NORMAL RETURN
00EF 205 $HIBER S ; UNDO ABOVE WAKE
00F6 206 SS_CHECK NORMAL ; CHECK FOR NORMAL RETURN
0124 207 :
0124 208 : THE FOLLOWING CODE ESTABLISHES UIC'S IN THE CONDITION 3 TABLE
0124 209 :
0124 210 :
59 00000000'9F D0 0147 211 MODE TO,20$,KRNL ; KERNEL MODE TO ACCESS PCB
59 00BC C9 D0 014E 212 MOVL @#$CH$GL CURPCB,R9 ; GET CURRENT PCB ADDRESS
0153 213 MOVL PCB$UIC(R9),R9 ; PICK UP UIC FROM PCB
0154 214 MODE FROM,20$ ; ... AND GET BACK TO USER MODE
0154 215 :
0154 216 : R9 NOW CONTAINS 'MY' UIC
59 5A 02 9A 0154 217 MOVZBL #2,R10 ; GET COND3 TABLE INDEX NUMBER INTO A REG
59 00010000 8F C1 0157 218 ADDL3 #^X10000,R9,COND3_E[R10] ; PUT DIFF GROUP UIC INTO 3RD TABLE ELT
0000024A'EF4A 5A D6 0164 219 INCL R10 ; POINT TO 4TH COND3 TABLE ELEMENT
0000024A'EF4A 59 D0 0166 220 MOVL R9,COND3_E[R10] ; PUT MY UIC INTO TABLE
0000024A'EF4A 5A D6 016E 221 INCL R10 ; POINT TO 5TH COND3 TABLE ELEMENT
0000024A'EF4A 59 01 C1 0170 222 ADDL3 #1,R9,COND3_E[R10] ; PUT DIFF MEMBER UIC INTO THE TABLE
0179 223 $CREMBX_S CHAN=MBXCHAN, LOGNAM=SUBJPRN, - ; GET MAILBOX FOR PROCESS
0179 224 MAXMSG=#120, PROMSK=#0, BUFQUO=#240
019E 225 SS_CHECK NORMAL ; CHECK NORMAL COMPLETION
01CC 226 $GETCHN_S CHAN=MBXCHAN, - ; GET CHAN INFO (UNIT NUMBER)
01C 227 PRIBUF=MBXCHANINFO
01E6 228 SS_CHECK NORMAL ; CHECK NORMAL COMPLETION
00000088'EF 00000020'EF 3C 0214 229 MOVZWL MBXCHANINFO+8+DIB$W_UNIT,MBXUNIT ; SAVE MAILBOX UNIT NUMBER
05 021F 230 RSB ; RETURN TO MAIN ROUTINE
0220 231 TM_CLEANUP::
0220 232 $DELMBX_S MBXCHAN ; DELETE TERMINATION MAILBOX
FDCF' 30 022E 233 BSBW MOD_MSG_PRINT ; PRINT TEST MODULE END MSG
05 0231 234 RSB ; RETURN TO MAIN ROUTINE
```



```
0232 236 .SBTTL CONDITION SUBROUTINES - SETUP AND CLEANUP
0232 237 :++
0232 238 : FUNCTIONAL DESCRIPTION:
0232 239 :
0232 240 : COND1 AND COND2 CLEANUP ARE SUBROUTINES WHICH ARE EXECUTED
0232 241 : BEFORE AND AFTER THE VERIFY SUBROUTINE, RESPECTIVELY, WHENEVER A NEW
0232 242 : CONDITION X VALUE IS SELECTED (SEE FUNCTIONAL DESCRIPTION OF SUCCOMMON
0232 243 : ROUTINE IN SUCCOMMON.MAR). ANY SETUP FUNCTION PARTICULAR TO THE
0232 244 : CONDITION X TABLE IS INCLUDED IN THE COND1 SUBROUTINE AND CLEANED
0232 245 : UP, IF NECESSARY, IN THE COND2 CLEANUP SUBROUTINE. THIS INCLUDES,
0232 246 : ESPECIALLY, CODE TO DETECT CONFLICTS AMONG CURRENT ENTRIES IN TWO
0232 247 : OR MORE CONDITION TABLES. IF A CONFLICT IS DETECTED, A NON-ZERO
0232 248 : VALUE IS STORED INTO CONFLICT, WHICH CAUSES THE CALLING ROUTINE
0232 249 : (SUCCOMMON) TO SKIP THE CURRENT ENTRY IN THE CONDITION X TABLE.
0232 250 :
0232 251 : CALLING SEQUENCE:
0232 252 :
0232 253 : BSBW COND1 BSBW COND2_CLEANUP
0232 254 : WHERE X = 1,2,3,4,5
0232 255 :
0232 256 : INPUT PARAMETERS:
0232 257 :
0232 258 : CONFLICT = 0
0232 259 :
0232 260 : IMPLICIT INPUTS:
0232 261 :
0232 262 : R2,3,4,5,6 CONTAIN CURRENT CONDITION TABLE INDEX VALUES
0232 263 : FOR COND TABLES 1,2,3,4,5, RESPECTIVELY.
0232 264 :
0232 265 : OUTPUT PARAMETERS:
0232 266 :
0232 267 : CONFLICT SET TO NON-ZERO IF COND TABLE CONFLICT DETECTED.
0232 268 :
0232 269 : IMPLICIT OUTPUTS:
0232 270 :
0232 271 : R2,3,4,5,6 PRESERVED
0232 272 :
0232 273 : COMPLETION CODES:
0232 274 :
0232 275 : NONE
0232 276 :
0232 277 : SIDE EFFECTS:
0232 278 :
0232 279 : NONE
0232 280 :
0232 281 :--
0232 282 :
0232 283 :
0232 284 :
05 0232 285 COND1:: RSB ; RETURN TO MAIN ROUTINE
0232 286
05 0233 287 COND1_CLEANUP:: RSB ; RETURN TO MAIN ROUTINE
0233 288
05 0234 289 COND2:: RSB ; RETURN TO MAIN ROUTINE
0234 290
05 0235 291 COND2_CLEANUP:: RSB ; RETURN TO MAIN ROUTINE
0235 292
```



```
0000016B'EF42 0000011C'8F D1 0236 293 COND3::
                                0236 294          CMPL  #SUBJPID,COND1_E[R2]      ; NON-ZERO PID SPECIFIED ?
                                0242 295          BEQLU 10$                      ; YES -- PROCESS IS 'OTHER'
000001AD'EF43 D5 0244 296          TSTL  COND2_E[R3]                      ; IS PROCESS NAME SPECIFIED ?
                                024B 297          BEQL  5$                      ; NO -- SUBJECT PROCESS IS 'SELF'
                                024D 298          CMPL  R4,#2                  ; DOES CONDITION 3 SPECIFY DIFFERENT GROUP ?
                                0250 299          BEQL 20$                      ; YES -- PROCESS NAME FOR DIFF GROUP IS CONF
                                0252 300          BRB   10$                      ; NO -- MAKE SURE COND 3 SPECIFIES 'OTHER'
                                0254 301 5$:
                                0254 302          ;
                                0254 303          ; PROCESS IS 'SELF'
                                0254 304          ;
0000024A'EF44 00000000'EF D1 0254 305          CMPL  ONES,COND3_E[R4]      ; DOES CONDITION 3 SPECIFY 'SELF' ?
                                0260 306          BEQLU COND3X                  ; YES -- THEN ALL 3 CONDIT'NS ARE CONSISTENT
                                0262 307          BRB   20$                      ; NO -- INDICATE CONFLICT & GET OUT
                                0264 308 10$:
                                0264 309          ;
                                0264 310          ; PROCESS IS 'OTHER'
                                0264 311          ;
0000024A'EF44 00000000'EF D1 0264 312          CMPL  ONES,COND3_E[R4]      ; DOES CONDITION 3 SPECIFY 'SELF' ?
                                0270 313          BNEQU COND3X                  ; NO -- THEN ALL 3 CONDITIONS ARE CONSISTENT
                                0272 314 20$:
00000000'EF 00000000'EF 90 0272 315          MOVB  ONES,CONFLICT          ; YES -- INDICATE CONFLICT
                                027D 316 COND3X:
                                027D 317          RSB                           ; RETURN TO MAIN ROUTINE
                                027E 318 COND3_CLEANUP::
                                027E 319          RSB                           ; RETURN TO MAIN ROUTINE
                                027F 320 COND4::
                                027F 321          RSB                           ; RETURN TO MAIN ROUTINE
                                0280 322 COND4_CLEANUP::
                                0280 323          RSB                           ; RETURN TO MAIN ROUTINE
                                0281 324 COND5::
                                0281 325          RSB                           ; RETURN TO MAIN ROUTINE
                                0282 326 COND5_CLEANUP::
                                0282 327          RSB                           ; RETURN TO MAIN ROUTINE
```



```
0283 329 .SBTTL FORM_CONDS
0283 330 :++
0283 331 : FUNCTIONAL DESCRIPTION:
0283 332 :
0283 333 : THE CURRENT FORM_CONDS FORMATS AND PRINTS INFORMATION ABOUT
0283 334 : THE CURRENT ELEMENT IN EACH OF THE CONDITION TABLES.
0283 335 :
0283 336 : CALLING SEQUENCE:
0283 337 :
0283 338 : BSBW FORM_CONDS
0283 339 :
0283 340 : INPUT PARAMETERS:
0283 341 :
0283 342 : NONE
0283 343 :
0283 344 : IMPLICIT INPUTS:
0283 345 :
0283 346 : R2,3,4,5,6 CONTAIN CURRENT CONDITION TABLE INDEX VALUES
0283 347 : FOR COND TABLES 1,2,3,4,5, RESPECTIVELY.
0283 348 : FOR X = 1,2,3,4,5 :
0283 349 : COND_X_T - TITLE TEXT FOR CONDX TABLE
0283 350 : COND_X_TAB - ELEMENT TEXT FOR CONDX TABLE
0283 351 : COND_X_C - CONTEXT OF THE CONDX TABLE
0283 352 : COND_X_E - DATA ELEMENTS OF THE CONDX TABLE
0283 353 :
0283 354 : OUTPUT PARAMETERS:
0283 355 :
0283 356 : NONE
0283 357 :
0283 358 : IMPLICIT OUTPUTS:
0283 359 :
0283 360 : NONE
0283 361 :
0283 362 : COMPLETION CODES:
0283 363 :
0283 364 : NONE
0283 365 :
0283 366 : SIDE EFFECTS:
0283 367 :
0283 368 : NONE
0283 369 :
0283 370 :--
0283 371 :
0283 372 :
0283 373 :
0283 374 FORM_CONDS::
0283 375 $FAO_S MSG1_INP_CTL,FAO_LEN,FAO_DESC,TESTNUM
02A2 376 : FORMAT CONDITIONS HEADER MSG
02A2 377 BSBW OUTPUT_MSG : ... AND PRINT IT
14 00 91 02A5 378 CMPB #COND1_C,#NULL : IS CONDITION 1 NULL ?
03 12 02A8 379 BNEQU 10$ : NO -- CONTINUE
00BF 31 02AA 380 BRW FORM_CONDSX : YES -- SUBROUTINE IS FINISHED
02AD 381 10$:
02AD 382 MOVAL COND1_T,MSG_A : SAVE ADDRESS OF CONDITION 1 TITLE FOR FAO
00000000'EF 00000120'EF DE 02AD 383 MOVL COND1_TAB[R2],MSG_B : SAVE ADDR OF COND 1 CURR TEXT ELT FOR FAO
00000000'EF 0000012D'EF42 D0 02B8 384 MOVB #COND1_C,MSG_CTXT : SAVE CONDITION 1 CONTEXT FOR FAO
00000000'EF 00 90 02C4 384 MOV_VAL COND1_C,COND1_E[R2],MSG_DATA1 : GIVE COND 1 DATA VALUE TO FAO
02CB 385
```



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      FD32' 30 02CB 386      BSBW WRITE_MSG2      : FORMAT AND WRITE CONDITION 1 MSG
14 00 91 02CE 387      CMPB #COND2_C,#NULL      : IS CONDITION 2 NULL ?
      03 12 02D1 388      BNEQU 20$      : NO -- CONTINUE
      0096 31 02D3 389      BRW FORM_CONDSX      : YES -- SUBROUTINE IS FINISHED
      02D6 390 20$:
00000000'EF 00000177'EF DE 02D6 391      MOVAL COND2_T,MSG_A      : SAVE ADDRESS OF CONDITION 2 TITLE FOR FAO
00000000'EF 0000018D'EF43 D0 02E1 392      MOVL COND2_TAB[R3],MSG_B      : SAVE ADDR OF COND 2 CURR TEXT ELT FOR FAO
      00000000'EF 00 90 02ED 393      MOVB #COND2_C,MSG_CTXT      : SAVE CONDITION 2 CONTEXT FOR FAO
      FD09' 30 02F4 394      MOV VAL COND2_C,COND2_E[R3],MSG_DATA1 : GIVE COND 2 DATA VALUE TO FAO
14 00 91 02F4 395      BSBW WRITE_MSG2      : FORMAT AND WRITE CONDITION 2 MSG
      03 12 02F7 396      CMPB #COND3_C,#NULL      : IS CONDITION 3 NULL ?
      006D 31 02FA 397      BNEQU 30$      : NO -- CONTINUE
      02FC 398      BRW FORM_CONDSX      : YES -- SUBROUTINE IS FINISHED
      02FF 399 30$:
00000000'EF 000001B5'EF DE 02FF 400      MOVAL COND3_T,MSG_A      : SAVE ADDRESS OF CONDITION 3 TITLE FOR FAO
00000000'EF 000001C3'EF44 D0 030A 401      MOVL COND3_TAB[R4],MSG_B      : SAVE ADDR OF COND 3 CURR TEXT ELT FOR FAO
      00000000'EF 00 90 0316 402      MOVB #COND3_C,MSG_CTXT      : SAVE CONDITION 3 CONTEXT FOR FAO
      FCE0' 30 031D 403      MOV VAL COND3_C,COND3_E[R4],MSG_DATA1 : GIVE COND 3 DATA VALUE TO FAO
14 14 91 0320 404      BSBW WRITE_MSG2      : FORMAT AND WRITE CONDITION 3 MSG
      47 13 0323 405      CMPB #COND4_C,#NULL      : IS CONDITION 4 NULL ?
      00000000'EF 0000025E'EF DE 0325 406      BEQLU FORM_CONDSX      : YES -- SUBROUTINE IS FINISHED
00000000'EF 0000025E'EF45 D0 0330 407      MOVAL COND4_T,MSG_A      : SAVE ADDRESS OF CONDITION 4 TITLE FOR FAO
      00000000'EF 14 90 033C 408      MOVL COND4_TAB[R5],MSG_B      : SAVE ADDR OF COND 4 CURR TEXT ELT FOR FAO
      FCBA' 30 0343 409      MOVB #COND4_C,MSG_CTXT      : SAVE CONDITION 4 CONTEXT FOR FAO
14 14 91 0343 410      MOV VAL COND4_C,COND4_E[R5],MSG_DATA1 : GIVE COND 4 DATA VALUE TO FAO
      21 13 0346 411      BSBW WRITE_MSG2      : FORMAT AND WRITE CONDITION 4 MSG
      00000000'EF 0000025F'EF DE 0348 412      CMPB #COND5_C,#NULL      : IS CONDITION 5 NULL ?
00000000'EF 0000025F'EF46 D0 0356 413      BEQLU FORM_CONDSX      : YES -- SUBROUTINE IS FINISHED
      00000000'EF 14 90 0362 414      MOVAL COND5_T,MSG_A      : SAVE ADDRESS OF CONDITION 5 TITLE FOR FAO
      FC94' 30 0369 415      MOVL COND5_TAB[R6],MSG_B      : SAVE ADDR OF COND 5 CURR TEXT ELT FOR FAO
      036C 416      MOVB #COND5_C,MSG_CTXT      : SAVE CONDITION 5 CONTEXT FOR FAO
      0369 417      MOV VAL COND5_C,COND5_E[R6],MSG_DATA1 : GIVE COND 5 DATA VALUE TO FAO
      036C 418      BSBW WRITE_MSG2      : FORMAT AND WRITE CONDITION 5 MSG
05 036C 419 FORM_CONDSX:      : RETURN TO CALLER
      036C 420      RSB
```



```
036D 422 .SBTTL VERIFY
036D 423 :++
036D 424 : FUNCTIONAL DESCRIPTION:
036D 425 :
036D 426 : VERIFY IS CALLED ONCE FOR EACH COMBINATION OF CONDITION
036D 427 : TABLE VALUES (AS DETERMINED BY THE INDEX REGISTERS R2,3,4,5,6 FOR
036D 428 : COND TABLES 1,2,3,4,5, RESPECTIVELY). VERIFY ESTABLISHES THE CONDITIONS
036D 429 : SPECIFIED BY THE COND TABLES AND ISSUES THE SUBJECT SYSTEM SERVICE
036D 430 : ($RESUME). THEN, THE SUCCESSFUL OPERATION OF THE SERVICE IS VERIFIED
036D 431 : BY EXAMINING THE STATUS CODE RETURNED, THE VALUES FOR RETURN ARGUMENTS
036D 432 : AND THE FUNCTIONALITY PERFORMED. THE EXAMINATIONS TAKE THE FORM OF
036D 433 : COMPARISONS AGAINST EXPECTED VALUES. ANY FAILING COMPARISON CAUSES AN
036D 434 : ERR_EXIT MACRO TO BE EXECUTED (EITHER DIRECTLY, OR INDIRECTLY,
036D 435 : THROUGH THE SS_CHECK MACRO); ERR_EXIT SETS EFLAG TO NON-ZERO,
036D 436 : PRINTS ERROR MESSAGES AND CAUSES AN IMMEDIATE RSB TO CALLER.
036D 437 : WHEN ERR_EXIT IS EXECUTED, FURTHER CALLS TO VERIFY ARE SUPPRESSED,
036D 438 : AND, AFTER EXECUTING CLEANUP SUBROUTINES, THE IMAGE EXITS.
036D 439 :
036D 440 : CALLING SEQUENCE:
036D 441 :
036D 442 : BSBW VERIFY
036D 443 :
036D 444 : INPUT PARAMETERS:
036D 445 :
036D 446 : NONE
036D 447 :
036D 448 : IMPLICIT INPUTS:
036D 449 :
036D 450 : R2,3,4,5,6 CONTAIN CURRENT CONDITION TABLE INDEX VALUES
036D 451 : FOR COND TABLES 1,2,3,4,5, RESPECTIVELY.
036D 452 : FOR X = 1,2,3,4,5 :
036D 453 : CONDX_E - ADDRESS OF TABLE OF DATA VALUES FOR CONDX
036D 454 : TABLE. IF THE CONTEXT OF TABLE X IS A SYSTEM SERVICE
036D 455 : ARGUMENT, THE ARGUMENT NAME MAY BE USED AS A SYNONYM
036D 456 : FOR CONDX_E.
036D 457 :
036D 458 : OUTPUT PARAMETERS:
036D 459 :
036D 460 : NONE
036D 461 :
036D 462 : IMPLICIT OUTPUTS:
036D 463 :
036D 464 : VERIFY HAS NO OUTPUT. SINCE ITS PURPOSE IS TO TEST FOR ERRORS,
036D 465 : IT MERELY RETURNS TO CALLER NORMALLY AFTER THE TESTS, PROVIDING
036D 466 : ALL WERE SUCCESSFUL; IF AN ERROR IS DISCOVERED, RETURN IS VIA
036D 467 : AN ERR_EXIT OR SS_CHECK MACRO, BOTH OF WHICH DOCUMENT DETECTED
036D 468 : ERRORS.
036D 469 :
036D 470 : COMPLETION CODES:
036D 471 :
036D 472 : EFLAG SET TO NON-ZERO IF ERROR ENCOUNTERED.
036D 473 :
036D 474 : SIDE EFFECTS:
036D 475 :
036D 476 : SS_CHECK AND ERR_EXIT MACROS CAUSE PREMATURE EXIT
036D 477 : (VIA RSB) IF ERROR ENCOUNTERED.
036D 478 :
```



```
036D 479 ;--
036D 480
036D 481
036D 482
036D 483
036D 484
0373 485
0375 486
0378 487
0378 488
0383 489
0389 490
0395 491
0397 492
039A 493
039A 494
039A 495
039A 496
03D5 497
03D5 498
0403 499
040E 500
040E 501
041A 502
0422 503
0422 504
0422 505
0422 506
0431 507
0438 508
043A 509
0445 510
044C 511
049B 512
049B 513
04A1 514
04A3 515
04AE 516
04B0 517
04BB 518
04C6 519
050B 520
050B 521
0516 522
0518 523
0523 524
0551 525
0553 526
0553 527
0553 528
057C 529
057C 530
05AA 531
05AA 532

00000000'EF 95 036D 479
03 13 036D 480
FF0B 30 0373 485
0000011C'EF 00000114'EF D0 0378 487
00000110'EF D4 0383 489
0000024A'EF44 00000000'EF D1 0389 490
03 12 0395 491
0074 31 0397 492
039A 493
039A 494
039A 495
039A 496
03D5 497
03D5 498
0000011C'EF 00000118'EF D0 0403 499
0000010C'EF 0000016B'EF42 D0 040E 500
59 000001AD'EF43 D0 041A 502
0422 503
0422 504
0422 505
0422 506
00000000'8F 50 D1 0431 507
61 13 0438 508
00000000'EF 00000000'8F D0 043A 509
00000000'EF 50 D0 0445 510
044C 511
049B 512
049B 513
0000010C'EF D5 04A1 514
68 13 04A3 515
0000010C'FF 0000011C'EF D1 04AE 516
5B 13 04B0 517
00000000'EF 0000011C'EF D0 04BB 518
00000000'EF 0000010C'FF D0 04C6 519
050B 520
050B 521
0000011C'EF 00000118'EF D1 0516 522
3B 13 0518 523
0523 524
57 11 0551 525
0553 526
0553 527
0553 528
057C 529
057C 530
05AA 531
05AA 532

VERIFY::
TSTB CFLAG ; SHOULD CONDITIONS BE PRINTED ?
BEQL 5$ ; NO -- CONTINUE
BSBW FORM_CONDS ; YES -- FMT & PRINT ALL CONDS FOR THIS T.C.

5$:
MOVL SELFPID,SUBJPID ; ASSUME THE SUBJECT PID IS SELF
CLRL ZEROPID ; CLEAR ZERO PID
CMPL ONES,COND3_E[R4] ; IS PROCESS FOR THIS TEST CASE SELF ?
BNEQU 7$ ; NO -- CONTINUE
BRW 10$ ; YES -- DON'T CREATE A PROCESS

7$:
$CREPRC_S PIDADR=CREPID, PRCNAM=SUBJPRN, -
UIC=COND3_E[R4], IMAGE=IMAGNAM, -
MBXUNT=MBXUNIT, QUOTA=QUOTALIST
; CREATE THE SUBJECT PROCESS
SS_CHECK NORMAL ; ... AND MAKE SURE IT CREATED OK
MOVL CREPID,SUBJPID ; MAKE THE SUBJCT PID = THE ONE JUST CREATED

10$:
MOVL COND1_E[R2],DEST_PIDADR ; GET PID ADDRESS OUT OF TABLE
MOVL COND2_E[R3],R9 ; PRCNAM ADDR INTO REG FOR INDIRECT REF'RNCE

; ***** SYSTEM SERVICE CALL WHICH IS THE SUBJECT OF THIS TEST CASE *****

$RESUME_S PIDADR=@DEST_PIDADR, PRCNAM=(R9)
CMPL R0,#SS$ _NORMAL ; CODE RECEIVED = CODE EXPECTED ?
BEQLU 18$ ; YES -- CONTINUE
MOVL #SS$ _NORMAL,EXPV ; NO -- LOAD UP EXPECTED AND
MOVL R0,RCV ; ... RECEIVED VALUES, THEN EXIT
ERR_EXIT LONG,<INCORRECT STATUS CODE RETURNED FROM RESUME>

18$:
TSTL DEST_PIDADR ; PID RETURNED BY RESUME ?
BEQL 20$ ; NO -- KEEP GOING
CMPL SUBJPID,@DEST_PIDADR ; YES -- IS IT THE CORRECT ONE ?
BEQL 20$ ; YES -- CONTINUE
MOVL SUBJPID,EXPV ; NO --LOAD UP EXPECTED AND
MOVL @DEST_PIDADR,RCV ; ... RECEIVED VALUES, THEN EXIT
ERR_EXIT LONG,<INCORRECT PID RETURNED BY RESUME>

20$:
CMPL CREPID,SUBJPID ; WAS A PROCESS CREATED ?
BEQLU 30$ ; YES -- GO WAIT FOR IT TO COMPLETE
$SUSPND_S ; NO -- OFFSET SUBJECT RESUME WITH SUSPND
SS_CHECK NORMAL ; CHECK FOR NORMAL RETURN
BRB VERIFYX ; ... AND GO EXIT

30$:
$QIOW_S CHAN=MBXCHAN, FUNC=#IOS READVBLK, -
P1=MBXBUFF+8, P2=MBXBUFF
; WAIT FOR CREATED PROCESS TO SEND MAIL
; CHECK FOR NORMAL STATUS CODE

VERIFYX:
RSB ; RETURN TO CALLER
```



```
05AB 534 .SBTTL VFY_CLEANUP
05AB 535 :++
05AB 536 : FUNCTIONAL DESCRIPTION:
05AB 537 :
05AB 538 : VFY_CLEANUP EXECUTES SYSTEM SERVICES TO UNDO THE
05AB 539 : EFFECT OF THOSE ISSUED IN THE VERIFY SUBROUTINE. VFY_CLEANUP MUST
05AB 540 : ASSUME THAT VERIFY MAY NOT HAVE EXECUTED IN ITS ENTIRETY (IF AN
05AB 541 : ERROR IS FOUND). ALSO, VFY_CLEANUP MAY ISSUE SS_CHECK OR ERR_EXIT
05AB 542 : ONLY AFTER PERFORMING ALL OF ITS CLEANUP OPERATIONS; THIS IS REQUIRED
05AB 543 : IN THE EVENT THAT VFY_CLEANUP IS CALLED DURING ERROR PROCESSING,
05AB 544 : WHEN PERFORMING THE REQUIRED CLEANUP IS MORE IMPORTANT THAN
05AB 545 : POSSIBLY DISCOVERING A SECOND ERROR.
05AB 546 :
05AB 547 : CALLING SEQUENCE:
05AB 548 :
05AB 549 : BSBW VFY_CLEANUP
05AB 550 :
05AB 551 : INPUT PARAMETERS:
05AB 552 :
05AB 553 : NONE
05AB 554 :
05AB 555 : IMPLICIT INPUTS:
05AB 556 :
05AB 557 : R2,3,4,5,6 CONTAIN CURRENT CONDITION TABLE INDEX VALUES
05AB 558 : FOR COND TABLES 1,2,3,4,5, RESPECTIVELY.
05AB 559 : FOR X = 1,2,3,4,5 :
05AB 560 : CONDX_E - ADDRESS OF TABLE OF DATA VALUES FOR CONDX
05AB 561 : TABLE. IF THE CONTEXT OF TABLE X IS A SYSTEM SERVICE
05AB 562 : ARGUMENT, THE ARGUMENT NAME MAY BE USED AS A SYNONYM
05AB 563 : FOR CONDX_E.
05AB 564 :
05AB 565 : OUTPUT PARAMETERS:
05AB 566 :
05AB 567 : NONE
05AB 568 :
05AB 569 : IMPLICIT OUTPUTS:
05AB 570 :
05AB 571 : NONE
05AB 572 :
05AB 573 : COMPLETION CODES:
05AB 574 :
05AB 575 : EFLAG SET TO NON-ZERO IF ERROR ENCOUNTERED.
05AB 576 :
05AB 577 : SIDE EFFECTS:
05AB 578 :
05AB 579 : SS_CHECK AND ERR_EXIT MACROS CAUSE PREMATURE EXIT
05AB 580 : (VIA RSB) IF ERROR ENCOUNTERED.
05AB 581 :
05AB 582 : --
05AB 583 :
05AB 584 :
05AB 585 :
05AB 586 VFY_CLEANUP::
05AB 587 CMPL CREPID,SUBJPID ; WAS A PROCESS CREATED FOR THIS TEST CASE ?
05AB 588 BNEQU VFY_CLEANUPX ; NO -- JUST EXIT
05AB 589 $DELPRC_S SUBJPID ; YES -- DELETE IT
05C7 590 VFY_CLEANUPX:
```

0000011C'EF 00000118'EF D1  
OF 12



SATSSS38  
V04-000

SATS SYSTEM SERVICE TESTS \$RESUME (SUCC 16-SEP-1984 00:52:14 VAX/VMS Macro V04-00 Page 15  
VFY\_CLEANUP 5-SEP-1984 04:30:57 [UETPSY.SRC]SATSSS38.MAR;1 (1)

05 05C7 591 RSB  
05C8 592 .END

; RETURN TO CALLER



=	0000000C		
	*****	X	04
	*****	X	04
	*****	X	04
	*****	X	04
	00000283	RG	04
	0000036C	R	04
	00000065	R	02
	*****	X	04
=	00000004	G	
	0000008C	R	03
	00000008	R	03
	0000000C	R	03
	00000088	R	03
	*****	X	04
	*****	X	04
	00000019	R	02
	00000039	RG	02
	*****	X	04
	*****	X	04
	*****	X	04
=	00000000	G	
=	00000014	G	
	*****	X	04
	*****	X	04
=	000000BC		
	*****	X	04
=	00000000		
=	00000003		
=	00000004		
=	00000006		
=	00000000		
=	00000007		
=	00000008		
=	00000009		
	00000000	R	03
=	00000002		
	*****	X	04
=	00000008	G	
	00000084	R	02
	*****	X	04
	*****	X	04
	*****	X	04
	*****	X	04
	00000114	R	03
	*****	X	04
	0000011C	R	03
	00000051	R	02
	*****	X	04
	*****	GX	04
	*****	GX	04
	*****	GX	04
	*****	GX	04
	*****	GX	04
	*****	X	04
	*****	GX	04
	*****	GX	04



SATSSS38  
Symbol table

SATS SYSTEM SERVICE TESTS \$RESUME (SUCC H 15 16-SEP-1984 00:52:14 VAX/VMS Macro V04-00  
5-SEP-1984 04:30:57 [UETPSY.SRC]SATSSS38.MAR;1

Page 17  
(1)

SYSSQIOW	*****	GX	04
SYSSRESUME	*****	GX	04
SYSSSETPRN	*****	GX	04
SYSSSETPRV	*****	GX	04
SYSSSUSPND	*****	GX	04
SYSSWAKE	*****	GX	04
TESTNUM	*****	X	04
TEST_MOD_NAME	00000000	RG	02
TEST_MOD_NAME_D	00000009	R	02
TEST_MOD_SUCC	*****	X	04
TMD_ADDR	*****	X	04
TM_CLEANUP	00000220	RG	04
TM_SETUP	00000000	RG	04
VERIFY	0000036D	RG	04
VERIFYX	000005AA	R	04
VFY_CLEANUP	000005AB	RG	04
VFY_CLEANUPX	000005C7	R	04
WORD	= 00000002	G	
WRITE_MSG2	*****	X	04
ZEROPTD	00000110	R	03

+-----+  
! Psect synopsis !  
+-----+

PSECT name	Allocation	PSECT No.	Attributes
. ABS	00000000 ( 0.)	00 ( 0.)	NOPIC USR CON ABS LCL NOSHR NOEXE NORD NOWRT NOVEC BYTE
\$ABSS	00000000 ( 0.)	01 ( 1.)	NOPIC USR CON ABS LCL NOSHR EXE RD WRT NOVEC BYTE
RODATA	000000A7 ( 167.)	02 ( 2.)	NOPIC USR CON REL LCL NOSHR NOEXE RD NOWRT NOVEC LONG
RWDATA	00000260 ( 608.)	03 ( 3.)	NOPIC USR CON REL LCL NOSHR NOEXE RD WRT NOVEC LONG
SATSSS38	000005C8 ( 1480.)	04 ( 4.)	NOPIC USR CON REL LCL NOSHR EXE RD WRT NOVEC BYTE

+-----+  
! Performance indicators !  
+-----+

Phase	Page faults	CPU Time	Elapsed Time
Initialization	30	00:00:00.10	00:00:00.32
Command processing	107	00:00:00.68	00:00:02.98
Pass 1	300	00:00:09.01	00:00:18.16
Symbol table sort	0	00:00:00.79	00:00:00.93
Pass 2	128	00:00:02.15	00:00:02.61
Symbol table output	17	00:00:00.11	00:00:00.12
Psect synopsis output	2	00:00:00.03	00:00:00.03
Cross-reference output	0	00:00:00.00	00:00:00.00
Assembler run totals	586	00:00:12.87	00:00:25.15

The working set limit was 1500 pages.  
46932 bytes (92 pages) of virtual memory were used to buffer the intermediate code.  
There were 30 pages of symbol table space allocated to hold 489 non-local and 44 local symbols.  
592 source lines were read in Pass 1, producing 24 object records in Pass 2.  
48 pages of virtual memory were used to define 38 macros.



+-----+  
! Macro library statistics !  
+-----+

Macro library name	Macros defined
-----	-----
\$255\$DUA28:[SHRLIB]UETP.MLB;1	9
\$255\$DUA28:[SYS.OBJ]LIB.MLB;1	2
\$255\$DUA28:[SYSLIB]STARLET.MLB;2	24
TOTALS (all libraries)	35

896 GETS were required to define 35 macros.

There were no errors, warnings or information messages.

MACRO/LIS=LIS\$:SATSSS38/OBJ=OBJ\$:SATSSS38 MSRC\$:SATSSS38/UPDATE=(ENH\$:SATSSS38)+EXECML\$/LIB+SHRLIB\$:UETP/LIB



0422 AH-BT13A-SE  
VAX/VMS V4.0

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